

ABSTRACT

The present invention provides a titanium-made plate-type heat exchanger comprising first-fluid flow paths and second-fluid flow paths arranged alternately, which is formed by joining titanium-made constituting members, wherein: a titanium-zirconium based brazing solder containing 20 to 40 wt.% of titanium and 20 to 40 wt.% of zirconium, which melts under 880°C, is coated over positions to be connected of the constituting members, and brazing solder coated constituting members are heated under 880°C in a vacuum and/or inert gas atmosphere. The present invention also provides a production method of the heat exchanger, which can prevent titanium-made constituting members of the heat exchanger from being deteriorated due to over-heating.